CLAIMS

We claim:

1.   A method, comprising:

sharing a wireless communications module between a primary processor system and a secondary

processor system.

2.   The method of claim 1, wherein sharing comprises:

routing wireless communications between the primary processor system and the GPRS

communications module via a sharing module; and

routing wireless communications between the secondary processor system and the GPRS

communications module via the sharing module.

3.   The method of claim 2, wherein sharing further comprises:

presenting the wireless communications module as a slave device; and

presenting the primary processor system and secondary processor system as master devices to the

wireless communications module.

4.   The method of claim 2, wherein sharing further comprises selecting whether to service

wireless communications either of the primary processor system or the secondary processor

system.

5.   The method of claim 2, wherein sharing further comprises:

translating all wireless packets between a first transport mode and a second transport mode.

6. The method of claim 5, wherein the first transport mode includes a universal serial bus

    (USB), an RS-232 connection, Firewire, and mPCI; and

wherein the second transport mode includes a universal serial bus (USB), an RS-232 connection,

Firewire, and mPCI.

7. The method of claim 2, wherein the sharing module, the primary processor system and the

    secondary processor system are included in a notebook computer, and wherein the wireless

    communications module is a GPRS communications module.

8. The method of claim 6, wherein the sharing module is integrated into the secondary

    processor system; and

wherein the secondary processor system is a low-power computer system and the primary

processor system is a main CPU/OS computer system.

9. The method of claim 6, wherein the sharing module is integrated into the secondary

    processor system, and the secondary processor system is a multi-function GPRS enabled

    device; and

wherein the primary processor system includes a notebook, a tablet, a laptop, and a desktop

computer system.

10. The method of claim 9, wherein the sharing module is integrated with a secondary controller

    of the secondary processor system.

11. The method of claim 6, wherein the sharing module is included in the primary processor system.

12. The method of claim 2, wherein the GPRS module communicates with one or more secondary GPRS devices via a GPRS network.

13. The method of claim 2, wherein the sharing module communicates with a USB host controller and a GPRS module.

14. The method of claim 2, further comprising switching control between the primary processor system and secondary processor system, upon the occurrence of an event, wherein the event includes opening of a computer lid, receiving a data message by the first processor system, receiving a data message by the second processor system, closing a computer lid, and receiving a switch command.

15. A system, comprising:

means for sharing a wireless communications module between a primary processor system and a secondary processor system.

16. The system of claim 15, wherein sharing comprises:

means for routing wireless communications between the primary processor system and the wireless communications module via a sharing module; and

means for routing wireless communications between the secondary processor system and the wireless communications module via the sharing module.

17. The system of claim 16, wherein sharing further comprises:

means for presenting the wireless communications module as a slave device; and

means for presenting the primary processor system and secondary processor system as master

devices to the wireless communications module.

18. The system of claim 16, wherein sharing further comprises means for selecting whether to

service either wireless communications of the primary processor system or the secondary

processor system.

19. The system of claim 16, wherein sharing further comprises means for translating wireless

data packets between a first transport mode and a second transport mode.

20. The system of claim 19, wherein the first transport mode includes a universal serial bus

(USB), an RS-232 connection, Firewire, and mPCI; and

wherein the second transport mode includes a universal serial bus (USB), an RS-232 connection,

Firewire, and mPCI.

21. The system of claim 16, wherein the sharing module, the primary processor system and the

secondary processor system are included in a notebook computer, and wherein the wireless

communications module is a GPRS communications module.

22. The system of claim 20, wherein the sharing module is integrated into the secondary

processor system; and

wherein the secondary processor system is a low-power computer system and the primary processor system is a main CPU/OS computer system.

23. The system of claim 20, wherein the sharing module is integrated into the secondary processor system, and the secondary processor system is a multi-function GPRS enabled device; and

wherein the primary processor system includes a notebook, a tablet, a laptop, and a desktop computer system.

24. The system of claim 23, wherein the sharing module is integrated with a secondary controller of the secondary processor system.

25. The system of claim 20, wherein the sharing module is included in the primary processor system.

26. The system of claim 16, wherein the GPRS module communicates with one or more secondary GPRS devices via a GPRS network.

27. The system of claim 16, wherein the sharing module communicates with a USB host controller and a GPRS module.

28. The system of claim 16, further comprising means for switching control between the primary processor system and secondary processor system, upon the occurrence of an event, wherein the event includes opening of a computer lid, receiving a data message by the first processor

system, receiving a data message by the second processor system, closing a computer lid, and receiving a switch command.

29. A computer-readable medium having stored thereon a plurality of instructions, said plurality of instructions when executed by a computer, cause said computer to perform:
sharing a GPRS communications module between a primary processor system and a secondary processor system.

30. The computer-readable medium of claim 29, having stored thereon additional instructions, said additional instructions when executed by a computer, cause said computer to further perform:
routing GPRS communications between the primary processor system and the GPRS communications module via a sharing module; and
routing GPRS communications between the secondary processor system and the GPRS communications module via the sharing module.

31. The computer-readable medium of claim 30, having stored thereon additional instructions, said additional instructions when executed by a computer, cause said computer to further perform:
presenting the GPRS communications module as a slave device; and
presenting the primary processor system and secondary processor system as master devices to the GPRS communications module.

32. The computer-readable medium of claim 30, having stored thereon additional instructions, said additional instructions when executed by a computer, cause said computer to further perform selecting whether to service either GPRS communications of the primary processor system or the secondary processor system.

33. The computer-readable medium of claim 30, having stored thereon additional instructions, said additional instructions when executed by a computer, cause said computer to further perform translating GPRS data packets between a first transport mode and a second transport mode.

34. The computer-readable medium of claim 33, wherein the first transport mode includes a universal serial bus (USB), an RS-232 connection, Firewire, and mPCI; and wherein the second transport mode includes a universal serial bus (USB), an RS-232 connection, Firewire, and mPCI.

35. The computer-readable medium of claim 35, wherein the sharing module, the primary processor system and the secondary processor system are included in a notebook computer.

36. The computer-readable medium of claim 34, wherein the sharing module is integrated into the secondary processor system; and wherein the secondary processor system is a low-power computer system and the primary processor system is a main CPU/OS computer system.

37. The computer-readable medium of claim 34, wherein the sharing module is integrated into the secondary processor system, and the secondary processor system is a multi-function GPRS enabled device; and

wherein the primary processor system includes a notebook, a tablet, a laptop, and a desktop computer system.

38. The computer-readable medium of claim 37, wherein the sharing module is integrated with a secondary controller of the secondary processor system.

39. The computer-readable medium of claim 34, wherein the sharing module is included in the primary processor system.

40. The computer-readable medium of claim 30, wherein the GPRS module communicates with one or more secondary GPRS devices via a GPRS network.

41. The computer-readable medium of claim 30, wherein the sharing module communicates with a USB host controller and a GPRS module.

42. The computer-readable medium of claim 30, having stored thereon additional instructions, said additional instructions when executed by a computer, cause said computer to further perform switching control between the primary processor system and secondary processor system, upon the occurrence of an event, wherein the event includes opening of a computer lid, receiving a data message by the first processor system, receiving a data message by the second processor system, closing a computer lid, and receiving a switch command.

43. An apparatus, comprising:

a GPRS sharing module;

a GPRS communications module connected to the GPRS sharing module;

a primary processor system connected to the GPRS sharing module;

and a secondary processor system connected to the GPRS sharing module,

wherein the GPRS sharing module is configured to allow the primary processor system and

secondary processor system to share a host controller of the GPRS communications module.

44. The apparatus of claim 43, wherein the sharing module

routes GPRS communications between the primary processor system and the GPRS

communications module via a sharing module; and

routes GPRS communications between the secondary processor system and the GPRS

communications module via the sharing module.

45. The apparatus of claim 44, wherein the sharing module

presents the GPRS communications module as a slave device; and

presents the primary processor system and secondary processor system as master devices to the

GPRS communications module.

46. The apparatus of claim 44, wherein the sharing module selects whether to service GPRS

communications either of the primary processor system or the secondary processor system.

47. The apparatus of claim 44, wherein the sharing module translates all GPRS packets between a first transport mode and a second transport mode.

48. The apparatus of claim 47, wherein the first transport mode includes a universal serial bus (USB), an RS-232 connection, Firewire, and mPCI; and

wherein the second transport mode includes a universal serial bus (USB), an RS-232 connection, Firewire, and mPCI.

49. The apparatus of claim 43, wherein the sharing module, the primary processor system and the secondary processor system are included in a notebook computer.

50. The apparatus of claim 48, wherein the sharing module is integrated into the secondary processor system; and

wherein the secondary processor system is a low-power computer system and the primary processor system is a main CPU/OS computer system.

51. The apparatus of claim 48, wherein the sharing module is integrated into the secondary processor system, and the secondary processor system is a multi-function GPRS enabled device; and

wherein the primary processor system includes a notebook, a tablet, a laptop, and a desktop computer system.

52. The apparatus of claim 51, wherein the sharing module is integrated with a secondary controller of the secondary processor system.

53. The apparatus of claim 48, wherein the sharing module is included in the primary processor system.

54. The apparatus of claim 43, wherein the GPRS module communicates with one or more secondary GPRS devices via a GPRS network.

55. The apparatus of claim 44, wherein the sharing module communicates with a USB host controller and a GPRS module.

56. The apparatus of claim 43, wherein the sharing module switches control of the GPRS module between the primary processor system and secondary processor system, upon the occurrence of an event, wherein the event includes opening of a computer lid, receiving a data message by the first processor system, receiving a data message by the second processor system, closing a computer lid, and receiving a switch command.

57. An apparatus, comprising:
a first hardware interface;
a sharing module coupled to the universal serial bus hardware interface,
wherein the sharing module allows a wireless communications module to be shared between a
    primary processor system and a secondary processor system; and
a second hardware interface coupled to the sharing module.

58. The apparatus of claim 57, wherein the sharing module includes:
a GPRS NDIS driver to receive and send data packets with the second hardware interface; and

a USB function driver to receive and send the data packets with the first hardware interface.

59. The apparatus of claim 58, wherein the USB function driver includes a protocol translator to translate between RNDIS and NDIS.

60. The apparatus of claim 59, wherein the sharing module is a GPRS sharing module.